

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 85-21

REVISING AND REISSUING TIME SCHEDULE ORDER NO. 81-12

AN ORDER DIRECTING THE CITY OF SUNNYVALE
TO COMPLY WITH REQUIREMENTS PRESCRIBED BY THE
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD,
SAN FRANCISCO BAY REGION, IN ORDER NO. 82-37
(NPDES PERMIT NO. CA0037621)

The California Regional Water Quality Control Board (hereinafter Board), San Francisco Bay Region, finds that:

1. This Board adopted Order No. 82-37 on June 16, 1982, reissuing waste discharge requirements for the City of Sunnyvale Water Pollution Control Plant, (hereinafter discharger). Order No. 82-37 contains prohibitions affecting the discharger's current and future discharge of wastes to waters of South San Francisco Bay or its tributaries south of Dumbarton Bridge. The discharge prohibitions implement the Board's adopted Water Quality Control Plan for San Francisco Bay Basin and the State Board Policy for Enclosed Bays and Estuaries. The prohibitions in Order No. 82-37 have not been met; under the Federal Municipal Compliance Policy and State's NPDES Compliance Policy the discharger must comply with these prohibitions by July 1, 1988.
2. The discharger and the Cities of San Jose, Santa Clara, and Palo Alto are members of the joint powers authority named the South Bay Dischargers Authority (SBDA). The SBDA is the lead agency for the construction of necessary disposal facilities, such as the Basin Plan Alternative (a joint outfall north of Dumbarton Bridge), for all three member agencies and has prepared a Final Environment Impact Statement (EIS) for the proposed disposal project.
3. The SBDA and Environmental Protection Agency Final EIR/EIS adopted July 1980 recommended the alternative of "No Action Beyond Currently Approved Improvements at Treatment Plants". The currently approved improvements at the discharger's treatment plant can meet current Board effluent limits when operating properly, but do not meet Basin Plan prohibitions for:
 - a. 10:1 initial dilution;
 - b. discharge to dead-end sloughs or confined waterways;
 - c. discharge to San Francisco Bay south of Dumbarton Bridge;

and may not meet Basin Plan prohibitions of discharge of conservative toxic and deleterious materials above levels achievable by source control, especially for continued discharge at the present location. In addition discharges may inhibit receiving water limitations from being consistently met.

4. The SBDA and EPA EIR/EIS recommended a "no project alternative" (No Further Action) for the following reasons:
 - "1. The degree to which increased dilution resulting from discharge north of the Dumbarton Bridge will mitigate the adverse impacts on the biota of the South Bay could not be predicted.
 2. Modeling studies had not shown that a substantial improvement in dissolved oxygen concentrations would result if the discharges were moved out of the sloughs (Individual Deep Water Discharge Alternative) or out of South Bay (Basin Plan Alternative).
 3. The viability of future full reclamation is now being investigated in a Regional Wastewater Reclamation Study. Several local small-scale programs are in the planning or implementation stage; however, these programs do not preclude a requirement for disposal of some portion of the flow. The Regional Wastewater Reclamation Study and smaller programs, if implemented, could meet the planning requirements of the San Francisco Bay Basin Plan."
5. The FEIR/FEIS concluded that the No Further Action Alternative would have the following water quality impacts:
 - a. Significant impacts can occur to aquatic biota during treatment plant upsets;
 - b. Dissolved oxygen level depletions would affect greater areas of Artesian Slough and Guadalupe Sloughs during the dry (summer) and canning seasons than the Basin Plan Alternative;
 - c. Relative toxicity levels would be of an order of magnitude higher (400 vs. 50 ml/l) with the No Further Action Alternative vs. the Basin Plan Alternative;
 - d. Continued potential for degradation of sediment quality in sloughs.
6. The FEIR/FEIS proposed further investigations that may allow possible reconsideration of the SBDA and EPA recommended No Project Alternative at some future date:
 - a. Further monitoring to fully evaluate the impacts of present treatment and disposal systems against the standard of a level of environmental protection equal to a deep water outfall.
 - b. Investigate regional and local wastewater reclamation.
7. The investigations noted in Finding 6. will not provide mitigation of the possible significant water quality impacts. The high costs of implementing the Basin Plan Alternative (jointly approaching \$200 million), the lack of historical water quality background data, and the possibility of only marginal water quality improvements make it infeasible at this time to fully mitigate or avoid the significant water quality impacts of the proposed "No Project" Alternative.
8. During the September 1979 and August 1980 treatment process upsets (and

for other minor periods) at the San Jose/Santa Clara Water Pollution Control Plant the need was demonstrated for increased reliability of the treatment process along with significant measures to mitigate plant upsets in the South Bay.

9. On September 2, 1980 the SBDA (on behalf of the discharger) submitted a petition and proposed monitoring program requesting the Board consider a deferral of 5 years from implementing the Basin Plan prohibitions. The petition makes clear that the SBDA and discharger feels that:

"...there are no available data that would indicate that the proposed change of discharge location would improve South Bay water and sediment quality; nor can such data be developed from a monitoring program with the disposal systems continuing at their present locations. Both the SBDA and EPA feel that such location change could be detrimental to said quality. Based upon the above factors and the high cost of proposed diversion pipeline, the SBDA expects to request cancellation of this discharge prohibition."

However, SBDA cited that there is a gap in the historic data of the South Bay in biological resources and the relationship between these resources, water quality and advanced waste treatment. Also SBDA believes that data from secondary discharges to the South Bay are not sufficient to demonstrate maintenance or enhancement of water quality by implementing advanced waste treatment. SBDA proposed the deferral for 5 years from Basin Plan prohibitions while a water quality study is initiated to provide some of the data to fill the gaps. SBDA believes the data will confirm that equivalent protection can be provided with continued discharge at the present sites compared to a sub-regional outfall at Dumbarton Bridge and also in the event of "spills" because the extremities are less sensitive and more resilient to degraded conditions, especially when coupled with adequate contingency plans. Due to the incomplete historical data, the incomplete implementation of the contingency plans, the 1979 and 1980 "spill" at the San Jose/Santa Clara Water Pollution Control Plant, and the lack of data verifying these assertions (especially for the long-term) the Board could not agree with SBDA's assertions at that time.

10. The Final EIR/EIS and petition were lacking in data sufficient to grant exceptions to the Basin Plan for the following reasons:
- a. Water quality issues have not been resolved to substantiate maintenance and/or enhancement of beneficial uses. These issues include dissolved oxygen levels, nutrients, toxicity, heavy metals, coliform and avian botulism.
 - b. Commitments have not been found to enable the implementation of substantial reclamation projects.
 - c. Net environmental benefits presently identified or implemented are inadequate.
 - d. Consistent compliance with NPDES Permit conditions for receiving waters has not been demonstrated.

- e. Adequate mitigation measures in case of treatment plant upsets have not been implemented nor a commitment made.
 - f. Enhancement, as presently documented is inadequate and the potential enhancements are also inadequately documented.
11. The Regional Board recognizes that:
- a. Some data are still lacking on the water quality impacts of the discharge of improved levels of treated municipal wastewater.
 - b. The cost of implementation of the Basin Plan Alternative is significant.
 - c. The viability of future full reclamation is still being investigated.
 - d. Full implementation of operation, contingency and mitigation measures by the discharger has not been accomplished.
12. A deferral is still reasonable to reconsider the implementation of the Basin Plan and Bay and Estuaries Policy prohibitions and to determine the earliest practicable date for compliance, provided the discharger resolves the issues in Findings 10 and 11. In Order No. 81-12 the Board granted the discharger(s) a five-year deferral to (a) conduct a water quality study and biological monitoring program to establish evidence to substantiate a request for exception from the prohibition, and (b) submit a technical report documenting net environmental benefits and enhancement by the continued discharge from the present location. The study and report are being conducted and in preparation respectively. There is no new evidence at this time that precludes continuing the deferral until conclusion of the study and preparation of the report.
13. The compliance time schedules in this Time Schedule Order supercede those contained in Time Schedule Order Nos. 81-12 and establish new time schedules where appropriate.
14. The Board has notified the discharger and interested agencies and persons of its intent to prescribe revised requirements for the discharger.
15. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.
16. The Board finds that this action is an order to enforce waste discharge requirements previously adopted by the Board. This action is therefore categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15121 of the Resources Agency Guidelines.

IT IS HEREBY ORDERED, that in accordance with Water Code Section 13300, the discharger shall comply with Prohibitions A.1. and Receiving Water Limitation C.2.a. and C.2.c. of Order No. 82-37 in accordance with the following schedule:

A. For Prohibition A.1. and Receiving Water Limitations C.2.a and C.2.c:

1. Continue the approved water quality study and biological monitoring program in a manner satisfactory to the Executive Officer. The discharger shall submit a semi-annual report due 1 July and an Annual Report due 1 July. The Annual Report shall provide analysis and interpretation of data along with recommendations for future work (to include modifications).
2. Continue the preparation of the technical report documenting the net environmental benefits and existing and potential enhancement of the receiving waters by the continued discharge to San Francisco Bay south of the Dumbarton Bridge. Submit Annual Progress Reports by 1 July.
3. Submit a final report on achieving compliance with Prohibition A.1 and Receiving Water Limitations C.2.a and C.2.c not later than 1 July 87. If the findings in the discharger's studies in 1. and 2. above support his desires to request the Board's consideration of granting an exception to Prohibition A.1. or Receiving Water Limitations C.2.a and C.2.c., then the discharger's final report shall also contain the request, documentation, implementation and mitigation plan, and rationale (e.g. net environmental benefits, etc.) for the Board's consideration.
4. Full compliance shall be achieved not later than July 1, 1988. Monitoring not meeting the Receiving Water Limitations of C.2.a. and C.2.c. prior to July 1, 1988 compliance date shall not be reported as violations.

B. Municipal Compliance Plan (reference Board Resolution No. 84-11):

<u>TASK</u>	<u>DATE DUE</u>
a. Draft Municipal Compliance Plan	2 April 85
b. Final Municipal Compliance Plan	1 June 85

C. Orders No. 81-12 and 82-38 are hereby rescinded.

D. This Order expires July 1, 1988.

The Board declares that it shall not undertake further enforcement to bring the discharger into compliance with Prohibition A.1. and Receiving Water Limitations C.2.a. and C.2.c. as contained in Order No. 82-37 provided:

- a. The discharger complies fully with all terms of the time schedule contained in this Order;
- b. The discharger complies fully with all terms of the Permit (Order No. 82-37) with the exception of Prohibition A.1. and Receiving Water Limitations C.2.a. and C.2.c.;
- c. Circumstances do not occur which would warrant modifications of the

permit or time schedule; and

- d. Circumstances do not occur which would warrant an action under Section 504 of the Federal Clean Water Act.

The action taken by this Board pertaining to the time schedule does not preclude the possibility of actions to enforce the permit by third parties pursuant to Section 505 of the Federal Clean Water Act.

I, Roger B. James, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on February 20, 1985.

ROGER B. JAMES
Executive Officer